

Preparative & Industrial Purification Tools

Counter Current Chromatography (CCC)



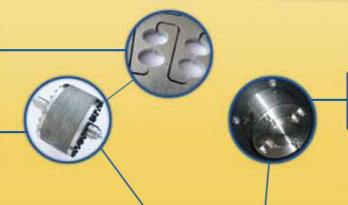
>> The complete solution for mg to tons purifications without silica and very low consumption of solvent



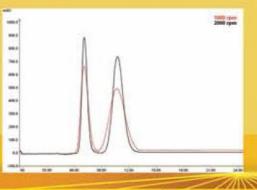
Specially designed for high performance and scalability

Twin cells designed for better retention which allows higher flow rate for fast separation.

High pressure resistance (up to 100 bar) allowing working with higher rotation speeds for better efficiency.



Dedicated rotary seal for simple maintenance.





SCPC-250-B

External manual valves for sample injection through loop and elution mode switching.

Control via built-in LCD screen and keypad, or by dedicated software "Armen Glider CPC".

- Special systems with PEEK and PTFE columns available for biotech purifications.
- Systems with two columns in one box available;
 100 mL + 1 L or 250 mL + 1 L.
 Fast method development on small column and scale up on 1 L column.
 Simple column switching by a built-in manual valve.





>> Armen Glider CPC : The most intuitive software

- Method creation wizard. Loading, equilibration, injection and purification process management.
- Integration of 2 simultaneous signals to recognize peaks of interest.
- Real Time colour display matching peak with tubes and tray correlation.
- Direct access to all parameters on flow chart while purification is running.
- Real Time gradient curves modifications: click-and-drag feature.
- Sequence of methods for automated multi injections.
- · Solvents consumption calculation before running.
- No solvent handling; Automatic generation of your solvent system with the combination of quaternary pump, mixing chamber and solvent system database.





From simple SCPC column to complete LC purifications solutions



Spot CPC + AP Pump

All SCPC columns are available with or without integrated pump. This pump could be directly controlled via SCPC LCD screen or "Armen Glider CPC" software.

Spot CPC + AP Pump + UV-VIS Detector + Armen LS-5600 Fraction Collector + "Armen Glider CPC"











Armen Instrument proposes also all kind of standalone peripherals as detectors, fraction collectors and software to get a complete automated system.

Spot CPC + Spot Prep II system

The combination of SCPC column with Spot Prep II and AGC software creates the most advanced purification tool, efficient for all kind of applications. The special features of the Spot Prep II (high pressure and high flow rate pump, automated loop injection and backflush valves, prep cell detector, ...) allow to work with SCPC columns up to 5 L. The Spot Prep II can also be used with Prep HPLC columns (from 4.6 to 100 mm ID) and MPLC columns (up to 1.2 kg).







Spot Prep II 50-300

>> Spot CPC:

From bench to industrial scale columns

Comparison results of scale up from SCPC-250 to SCPC-12.5L

Quantity injected	CPC column	Run time ¹	Solvent consumption	Enriched fraction weigh	Yield	HPLC control 2
1 g	250 ml	45 min	1 L/g injected	360 mg	36%	95%
50 g	12.5L	70 min	1 L/g injected	21.4 g	43%	93%
150 g	12.5L	70 min	0.33L/g injected	56,9 g	35,3%	89%

[:] without extrusion

3; % area of target compround



SCPC-250-L





- From simple CPC column to complete purification tool when coupled with Spot Prep II or standalone systems.
- From bench to industrial scale systems (100 mL, 250 mL, 1 L, 5 L, 12.5 L, ...).
- Control via built-in LCD screen and keypad or separated computer with dedicated software "Armen Glider CPC".
- Material in contact with liquid: SS 316L (or PEEK/PTFE for optional biocompatible versions)
- Sample injection : Manual (or automatic if coupled with a Spot Prep II, or through external optional pump).
- Maximum pressure: 100 bar.
- Power requirements: 110-240 VAC; 50-60 Hz.
- Dimensions: SCPC-100/250 > 480 W x 470 H x 405 D SCPC-100/250+1000 > 705 W x 710 H x 575 D (mm).
- Weight: SCPC-250-B > 40 kg SCPC-250-L > 50 kg SCPC-250+1000-B > 150 kg.

>> SCPC models available

Reference	Column volume	Max. rotation speed	Typical Flow rate	Injection range	
SCPC-100	100 mL	3000 rpm	5-15 mL/mln	From 10 mg to 1 g	
SCPC-250	250 mL	3000 rpm	5-15 mL/min	From 10 mg to 3-6 g	
SCPC-1000	1 L	1500 rpm	20-50 mL/min	From 100 mg to 15-30 g	
SCPC-100+1000	100 mL + 1 L	3000 rpm & 1500 rpm	5-15 & 20-50 mL/min	3-6 g & 15-30 g	
SCPC-250+1000	250 mL + 1 L	3000 rpm & 1500 rpm	5-15 & 20-50 mL/min	3-6 g & 15-30 g	
SCPC-5000	5L	1500 rpm	150-200 mL/min	100-150 g	
SCPC-12.5	12.5 L	1500 rpm	1.5 L/min	# 1 kg	
Custom SCPC	Up to 50 L				
TCPC-250 TMB ^{TM+}	2 x 125 mL	3000 rpm	5-15 mL/min		
TCPC-1000 TMB™+	2 x 500 mL	1500 rpm	20-50 mL/min	Continuous	
TCPC-12.5 TMB™*	2 x 6,25 L	1500 rpm	1,5 L/min		
Custom TCPC	Up to 50 L				

Biocompatible versions available

(* : patented by François Couillard & IFP)

Peripherals

Armen SCPC with pump*

PC-100/250-L > Built-in Pump 50 mL/min — 110 bar — Binary gradient (Quaternary optional)
PC-1000-L > Pump 100 mL/min — 110 bar — Binary gradient (Quaternary optional)

AMN-EC-04-58: UV DAD600 - 4 wavelengths simultaneously - 200-600 nm AMN-EC-04-59: UV DAD800 – 4 wavelengths simultaneously – 200-840 nm AMN-SE-04-01 : ELSD SEDEX 80LT

Armen Fraction Collector**

LS-5600 : Supplied with 3 racks SS-18.64.LT for 18 mm OD tubes (192 tubes for 6.1 L max.) (** All other racks size available)

AMN-AGC-VXX: "Armen Glider CPC" control software

Complete integrated LC systems

503002uvxe: "Spot Prep II" 50 mL/min – 300 bar – Binary, for SCPC-100 and SCPC-250 \$PII2502302uvxe: "Spot Prep II" 250 mL/min – 230 bar – Binary, for \$CPC-100, \$CPC-250 and \$CPC-1000

Your local distributor:

Manufacturer:

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